

REMARKS/ARGUMENTS

This paper is being provided in response to the April 28, 2004 Office Action for the above-referenced application. In this response, Applicant has amended Claims 1, 2, 9, 15, 23, 29, 30, and 37 in order to clarify that which Applicant deems to be the claimed invention. Applicant respectfully submits that the amendments to the claims are all supported by the originally filed application.

Applicant thanks the Examiner for the indication of the allowability of Claims 2-6 and 30-34 if rewritten in independent form including all of the limitations of the base claim and any intervening claim. In accordance with remarks set forth in the Office Action, Applicant has amended Claims 2-6 and 30-34. In view of the foregoing, Applicant respectfully submits that Claims 2-6 and 30-34 are now in condition for allowance and respectfully request that all objections to Claims 2-6 and 30-34 be reconsidered and withdrawn.

In response to the rejection of Claims 9-12, 23-26 and 37-40 under 35 U.S.C. 112, second paragraph, as being indefinite, Applicant has amended the claims in accordance with remarks set forth in the office action. Accordingly, Applicant respectfully requests that the rejection be reconsidered and withdrawn.

In response to the rejection of Claims 15-28 under 35 U.S.C.101, Applicant has amended the claims in accordance with remarks set forth in the Office Action. Accordingly, Applicant respectfully requests that the rejection be reconsidered and withdrawn.

The rejection of Claims 1, 7, 8, 13-15, 21, 22, 27-29, 35, 26, 41 and 42 under 35 U.S.C. § 102(e) as being unpatentable over Van Dyke. (U.S. Patent No. 6,321,314, hereinafter referred to as “Van Dyke”) is hereby traversed and reconsideration thereof is respectfully requested. Applicant respectfully submits that 1, 7, 8, 13-15, 21, 22, 27-29, 35, 26, 41 and 42, as amended herein, are patentable over the cited reference.

Claim 1, as amended herein, recites a method for restricting access to a device comprising: receiving a data operation in connection with the device; determining a type of said device as one of restricted access and standard access; determining if an opcode associated with said data operation is included in one of a first set of opcodes and a second set of opcodes, said first set of opcodes specifying standard data operations, and said second set of opcodes specifying restricted data operations; determining a target location associated with said data operation; and in response to determining one of said first and said second sets of opcodes, said type, and said target location, determining if said data operation is valid in accordance with said type and which of said sets of opcodes includes said opcode. Claims 7, 8, 13, and 14 depend from Claim 1.

Claim 15, as amended herein, recites a computer program product stored on a computer-readable medium for restricting access to a device comprising: machine executable code that receives a data operation in connection with the device; machine executable code that determines a type of said device as one of restricted access and standard access; machine executable code that determines if an opcode associated with said data operation is included in one of a first set of opcodes and a second set of opcodes, said first set of opcodes specifying standard data operations, and said second set of opcodes specifying restricted data operations; machine

executable code that determines a target location associated with said data operation; and machine executable code that, in response to determining one of said first and said second sets of opcodes, said type, and said target location, determines if said data operation is valid in accordance with said type and which of said sets of opcodes includes said opcode. Claims 21, 22, 27 and 28 depend from Claim 15.

Claim 29, as amended herein, recites an apparatus for restricting access to a device in a computer system comprising: means for receiving a data operation in connection with the device; means for determining a type of said device as one of restricted access and standard access; means for determining if an opcode associated with said data operation is included in one of a first set of opcodes and a second set of opcodes, said first set of opcodes specifying standard data operations, and said second set of opcodes specifying restricted data operations; means for determining a target location associated with said data operation; and means for determining, in response to said means for determining one of said first and said second sets of opcodes, said type, and said target location, if said data operation is valid in accordance with said type and which of said sets of opcodes includes said opcode. Claims 35, 36, 41 and 42 depend from Claim 29.

Van Dyke relates generally to computers and more particularly to restricting access to particular locations in system memory space and to address paging simulation for addressing memory. (Col. 1, Lines 4-7). Van Dyke provides for restricting memory access by monitoring memory access requests and determining the mode of operation of the processor when one of the memory access requests is requesting access to restricted memory. The mode of operation of the processor may be a system special operation, non-system special operation or a valid response to

a restricted memory access request. (Col. 2, Lines 37-58; Col. 7, Line 65-Col. 8, Line 67; Figures 6 and 7). The memory access request is modified when the mode of operation is non-system special and the memory access is requesting access to restricted memory. The memory access request may be altered when the memory request exceeds a maximum memory address threshold. (Col. 3, Lines 53-60).

Applicant's Claim 1, as amended herein, is neither disclosed nor suggested by Van Dyke in that Van Dyke neither discloses nor suggests *a method for restricting access to a device comprising: receiving a data operation in connection with the device; determining a type of said device as one of restricted access and standard access; determining if an opcode associated with said data operation is included in one of a first set of opcodes and a second set of opcodes, said first set of opcodes specifying standard data operations, and said second set of opcodes specifying restricted data operations; determining a target location associated with said data operation; and in response to determining one of said first and said second sets of opcodes, said type, and said target location, determining if said data operation is valid in accordance with said type and which of said sets of opcodes includes said opcode*, as set forth in amended Claim 1. Van Dyke discloses restricting access to memory. Van Dyke monitors memory access requests and determines a processor mode when accessing restricted memory. Van Dyke determines that a restricted memory access is made when a request is made for a memory address above a maximum memory address threshold. Van Dyke appears silent regarding any disclosure or suggestion of restricting access to a device including determining if a data operation is valid in accordance with a device type and which opcode set includes an opcode associated with the data operation. Accordingly, Van Dyke does not teach, disclose, or suggest at least the feature of *in response to determining one of said first and said second sets of*

opcodes, said type, and said target location, determining if said data operation is valid in accordance with said type and which of said sets of opcodes includes said opcode, as set forth in amended Claim 1.

For reasons similar to those set forth regarding Claim 1, Applicant's Claim 15 as amended herein, is also neither disclosed nor suggested by Van Dyke in that Van Dyke does not disclose or suggest *a computer program product stored on a computer-readable medium for restricting access to a device comprising: machine executable code that receives a data operation in connection with the device; machine executable code that determines a type of said device as one of restricted access and standard access; machine executable code that determines if an opcode associated with said data operation is included in one of a first set of opcodes and a second set of opcodes, said first set of opcodes specifying standard data operations, and said second set of opcodes specifying restricted data operations; machine executable code that determines a target location associated with said data operation; and machine executable code that, in response to determining one of said first and said second sets of opcodes, said type, and said target location, determines if said data operation is valid in accordance with said type and which of said sets of opcodes includes said opcode, as set forth in amended Claim 15.*

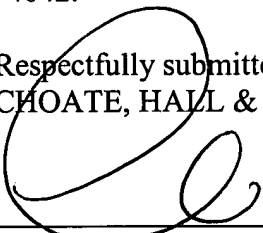
For reasons similar to those set forth regarding Claim 1, Applicant's Claim 29 as amended herein, is also neither disclosed nor suggested by Van Dyke in that Van Dyke does not disclose or suggest *an apparatus for restricting access to a device in a computer system comprising: means for receiving a data operation in connection with the device; means for determining a type of said device as one of restricted access and standard access; means for*

determining if an opcode associated with said data operation is included in one of a first set of opcodes and a second set of opcodes, said first set of opcodes specifying standard data operations, and said second set of opcodes specifying restricted data operations; means for determining a target location associated with said data operation; and means for determining, in response to said means for determining one of said first and said second sets of opcodes, said type, and said target location, if said data operation is valid in accordance with said type and which of said sets of opcodes includes said opcode, as set forth in amended Claim 29.

In view of the foregoing, Applicant respectfully requests that the rejection be reconsidered and withdrawn.

Based on the above, Applicant respectfully requests that the Examiner reconsider and withdraw all outstanding rejections and objections. Favorable consideration and allowance are earnestly solicited. Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at 617-248-4042.

Respectfully submitted,
CHOATE, HALL & STEWART



Anne E. Saturnelli
Registration No. 41,290

Patent Group
CHOATE, HALL & STEWART
Exchange Place
53 State Street
Boston, MA 02109-2804
Tel: (617) 248-5000
Fax: (617) 248-4000

Date: June 28, 2004